

(Per ILA Approval Requirements)

- CA Approval  
 JB Approval

(Corrected 11-19-09)

## REGIONAL FARE COORDINATION SYSTEM

### CHANGE ORDER NO. 40

CONTRACTOR: ERG Transit Systems (USA) Inc.  
CONTRACT NUMBER: 229944

This Change Order to Contract #229944 ("Change Order") is executed as of 9/03/09, by and between ERG Transit Systems (USA) Inc, a California corporation and wholly owned subsidiary of ERG Limited, an Australian corporation, (hereinafter referred to as the "Contractor") and each of the following seven public transportation agencies (hereinafter referred to individually as an "Agency" or collectively as the "Agencies"):

1. Central Puget Sound Regional Transit Authority ("Sound Transit")
2. King County ("King County")
3. Kitsap County Public Transportation Benefit Area ("Kitsap Transit")
4. Pierce County Public Transportation Benefit Area ("Pierce Transit")
5. Snohomish County Public Transportation Benefit Area ("Community Transit")
6. City of Everett ("Everett")
7. State of Washington, acting through the Washington State Department of Transportation, Washington State Ferries Division ("WSF")

#### Background

A. Effective April 29, 2003, each of the Agencies and the Contractor entered into Contract #229944 ("Contract") to implement a Regional Fare Coordination System ("RFC System") to establish a common fare system utilizing smart card technology. The Contractor is responsible for the development, implementation, operation and maintenance of the RFC System as specified in the Contract.

B. The Agencies and the Contractor desire to execute this Change Order No. 40 and the attached Amendment 40, to modify the Contract Division III, Section 6.III-9, "Stand Alone Fare Transaction Processor", and Exhibit 9, Price Schedule, Section VI, "Implementation Special Programs."

## Changes

The Agencies and the Contractor hereby agree to the following changes to the Contract:

### **1.0 Division III Changes**

The following sections of Section 6.III-9 are revised to read as follows:

#### **6.III-9 Stand-Alone Fare Transaction Processor**

##### **6.III-9.1 Subsystem Description - Stand-Alone FTP**

Stand-Alone FTPs (SAFTP) (DR 106) shall be ruggedized devices installed at Sound Transit Stations, and King County Metro and Community Transit bus rapid transit (BRT) stations and stops, and shall be designed for pedestal or wall mounting. Two SAFTP configurations shall be supplied:

1. Configuration 1: An SAFTP equipped with zone/destination buttons (DR 106.01). Passengers will select the number of zones of travel prior to presenting the fare card for payment.
2. Configuration 2: An SAFTP with no buttons that supports either “tag-on/tag-off” operation, or “tag-on” only operation.

At a minimum, the SAFTP shall consist of the modules listed in Figure III-9.1.

**Figure III-9.1  
FTP CONFIGURATION SUMMARY**

<b>Modules</b>	<b>Stand-Alone FTP</b>
* Central Processing Unit	X
* Contactless Card Interface	X
* Customer Display/Indicator	X
Power Supply	X
Ethernet communications port (for network connection to a DAC)	X
Pedestal/wall mount bracket	X
Selection Buttons	X (Configuration 1)

“X” denotes module required by Contract

\* Module described in Section 6.III-3

#### **6.III-9.2 Functional Requirements - Stand-Alone FTP**

The following functional requirements supplement those stated in Section 6.III-3.2.

- (a) Log-on from Agency personnel shall occur via a log-on smart card, or through a command issued through the DACS (to activate all FTPs at a station).
- (b) Zone selection buttons (Configuration 1) shall allow a customer to select a destination zone. The SAFTP shall calculate the fare based on the origin and destination zones or stations.

- (c) SAFTP (Configuration 1) shall be supplied with up to 10 zone selection buttons. The final number of zone selection buttons shall be determined at PDR (CDRL 2).
- (d) The SAFTP shall support peak and off-peak fare pricing based on time of day and day of week.
- (e) SAFTP's shall be configured for either "tag-on/tag-off" operation or "tag-on" operation only, depending on the service operated on and Agency preferences.
- (f) The location identification and the agency (which indirectly selects the "tag-on/tag-off" or "tag-on" mode) shall be configured during commissioning of the device.
- (g) For tag-on/tag-off operation, the SAFTP shall deduct an initial fare (for stored value operation) upon tag-on, and provide a credit back to the card upon tag-off. For pass-products, tag-ons and tag-offs shall be registered for the purpose of ridership data collection, but no fare shall be deducted.
- (h) For tag-on only operation, a default fare shall be charged for stored value at the time of tag-on, with the amount dependant upon the fare table in effect and customer fare basis information (e.g. adult/concession fare category and any preferred zone presets). For pass products, a tag-on shall be registered for the purpose of ridership data collection but no fare shall be deducted.
- (i) Data shall be written to the card as follows to support inspection using Portable Fare Transaction Processors (PFTP's):
  - i. For tag-on/tag-off operation, the card status shall be set to "tagged in" or "tagged out" depending on the action that has occurred, and PFTP devices shall read this status to determine fare payment status.
  - ii. For tag-on only operation, the fare payment transaction details shall be recorded on the card. The PFTP devices shall read these transaction details to determine fare payment status.

- (j) Transfer rules shall be as follows:

*12/1/09*

iii.i. Transfers from a tag-on/tag-off transit service to a tag-on only transit service shall result in the applicable fare being paid on both services, subject to transfer rules in effect, regardless of whether or not the tag-off occurred on the first service.

*12/1/01*

iv.ii. Transfers from a tag-on service to either another tag-on service (at an SAFTP or OBFTP), or to a tag-on/tag-off service, shall result in the applicable fare being paid on both services, subject to transfer rules in effect.

v.iii. If a tag-on occurs on a BRT SAFTP and the customer also tags on to an OBFTP on a bus servicing the route upon boarding, this shall be treated as an intra-service transfer with zero fare deducted but both transactions recorded.

### 6.III-9.3 Performance Requirements - Stand-Alone FTP

The minimum throughput rate for SAFTPs shall be 45 transactions per minute.

## 6.III-9.4 Physical Requirements - Stand-Alone FTP

### 9.4.1 Dimensions and Layout

A sample mockup of each SAFTP configuration and its mounting shall be demonstrated at time of PDR for each mounting location. (DR 106.01 and 106.02)

### 9.4.2 Structural Features

- (a) The SAFTP pedestal shall be constructed of 14 gauge stainless steel.
- (b) The wall mount shall be designed for outdoor installation at an unattended site, and shall include protection against removal or vandalism
- (c) The structural design shall be such that a force of 250 pounds applied in a horizontal plane at the topmost point of the SAFTP in any of the four mutual sides shall not result in dislodging of the SAFTP, pedestal or wall mount (where installed by the Contractor), and shall not bend or buckle the SAFTP, pedestal or wall mount.

### 9.4.3 Keypad (zone selection buttons)

The keypad/zone selection buttons shall meet the following requirements:

- HP 12/1/09* (a) All keys or buttons shall have a minimum life of 10 million year service life in normal operation, regardless of number of actuations. In the event that a key or button fails before the 10 year service life, it shall be replaced at no cost to the Agencies per Section 4.1 of Exhibit 14 of the Contract provided such failure does not constitute an Agency responsibility as defined in Section 4.2 of Exhibit 14.

- CIC 12/1/09* (b) The keypad shall be designed to be water and liquid resistant.

## 6.III-9.5 Data Exchange Requirements - Stand Alone FTP

- (a) SAFTPs shall include an Ethernet interface with an RJ45 connection for wired connection to a DAC.
- (b) The SAFTP shall include capabilities to be connected to a PC through a standard RS232 port for diagnostic purposes.
- (c) The Contractor shall provide the software for a PC that allows the use of a PC keyboard to operate the SAFTP and PC monitor to display the card data. This connection from the SAFTP will be provided via an auxiliary serial port that is sealed within the SAFTP mounting pole or wall cradle and accessible at a remote location within visual range of the SAFTP.
- (d) SAFTPs supplied for WSF shall include a standard serial interface, designed for future connection to WSF's new point of sale system. The Contractor shall provide an Interface Control Document (DR 106.02) fully describing this interface.
- (e) SAFTPs and associated DACs installed at Sound Transit rail stations shall communicate through Sound Transit's existing TVM communications network.
- (f) SAFTP's for BRT installations shall communicate via an Agency-supplied communications network to a designated DAC.

## **6.III-9.6 Installation Requirements - Stand-Alone FTP**

### **9.6.1 Contractor Installed Mounting Hardware**

- (a) SAFTPs shall be designed to be installed freestanding on a pedestal or wall mounted.
- (b) The Contractor shall furnish to the Contract Administrator and affected Agency with bolt pattern mounting requirements, foundation designs, and electrical/communications construction and connection details.
- (c) The Contractor shall furnish one (1) set of anchor bolts and all mounting hardware, including mounting or pedestal base if required, for each SAFTP furnished under this Contract.
- (d) The Contractor shall be responsible for mounting the SAFTPs with bolts or other means to a concrete surface. Each unit shall be properly leveled, accommodating station platform slopes of up to 2% traverse and 2.4% longitudinal, prior to being permanently installed.
- (e) Removal of SAFTPs shall be possible without damage to concrete or attachment devices. The attachment devices shall not be exposed to the public after the equipment is installed.
- (f) Conduit, power and communication cables leading from the power and communication sources to the junction box shall be installed by the Agency. Connections from the junction box to the SAFTP shall be the responsibility of the Contractor.
- (g) The Contractor shall install the SAFTPs over the junction boxes, providing bottom entry of power and communication lines such that no wiring or cabling is exposed outside the SAFTP cabinet or base, and the Contractor shall make final connections (plug-in) to power and communications.
- (h) The Contractor shall perform commissioning/commissioning test services of devices as well as installation testing services.

### **9.6.2 Agency Installed Mounting Hardware**

- (a) SAFTP's shall be designed to be installed freestanding on a pedestal or wall mounted.
- (b) The Contractor shall furnish to the Contract Administrator and affected Agency with bolt pattern mounting requirements, foundation designs, and electrical/communications construction and connection details.
- (c) The Contractor shall furnish one (1) set of anchor bolts and all mounting hardware, including mounting or pedestal base if required, for each SAFTP furnished under this contract.
- (d) The Agency shall be responsible for attaching the mounting hardware with bolts or other means to a concrete surface (pedestal) or wall (wall mount box). Each unit shall be properly leveled, accommodating station platform slopes of up to 2% traverse and 2.4% longitudinal, prior to being permanently installed.
- (e) Conduit, power and communication cables leading from the power and communication sources to the junction box shall be installed and terminated by the Agency.
- (f) The Agency shall be responsible for fitting SAFTP to SAFTP pole or SAFTP wall mount enclosure with three bolts supplied by ERG.

- (g) The Agency shall machine holes into base plates to accommodate surface mount conduit where preferred and shall fit base covers to SAFTP pole where required.
- (h) The Contractor shall perform commissioning/commissioning test services of the Agency installed devices as well as installation testing services.

## **2.0 Compensation Changes**

Exhibit 9, Price Schedule, is hereby amended without further execution as provided in Amendment 40, attached hereto as "Change Order No. 40 - Attachment A", to add a new Special Program to provide the fixed compensation due for all the Work of this Change Order. This additional compensation is agreed upon by the Parties in the interest of avoiding disputes, including disputes over the number of hours, the rates applied and whether certain types of hours are compensable. The Parties have agreed, without any admissions or concessions but in the interests of compromise and settlement that the amount noted in Exhibit 9 is the full amount due for any and all Work added by this Change Order including the delivery of CT's BRT SAFTP Operations Manual, Instructor Guide, Presentation, Student Workbook, and Quick Reference Guide. Provided, however, the Parties further agree that this compromise and settlement does not apply to, and shall not be construed as a controlling precedent for any subsequent Change Orders.

## **3.0 Other Terms and Conditions**

Except as expressly amended by this Change Order, the Contract remains in full force and effect. All other provisions of the Contract not referenced in this Change Order 40 shall remain in effect unless modified in other executed Amendments and Change Orders.

IN WITNESS WHEREOF, the parties hereto have executed this Change Order No. 40 to Contract #229944 as of the date set forth below its signature.

**ERG Transit Systems (USA) Inc.**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**Central Puget Sound Regional Transit Authority**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**King County**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**Pierce County Public Transportation Benefit Area**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**Washington State Ferries, acting through the Washington State Department of Transportation Ferries Division ("Washington State Ferries")**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**The Agencies**

By: \_\_\_\_\_

Their: \_\_\_\_\_

On behalf of the Agencies

Date: \_\_\_\_\_

**City of Everett**

By: \_\_\_\_\_

Ray Stephanson, Mayor, or His Designee

Date: \_\_\_\_\_

**ATTEST:**

By: \_\_\_\_\_

Sharon Marks, City Clerk

Date: \_\_\_\_\_

**APPROVED AS TO FORM:**

By: \_\_\_\_\_

Everett City Attorney

Date: \_\_\_\_\_

**Kitsap County Public Transportation Benefit Area**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**Snohomish County Public Transportation Benefit Area**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**Change Order No. 40 - Attachment A**

**Amendment 40  
to the**

**Contract for the Design, Implementation, Operation and Maintenance of the Regional  
Fare Coordination System**

This Amendment 40 to the Contract for the Design, Implementation, Operation and Maintenance of the Regional Fare Coordination System is entered into this \_\_\_\_ day of \_\_\_\_\_, 2009, by and between ERG Transit Systems (USA) Inc, a California corporation and wholly owned subsidiary of ERG Limited, an Australian corporation, (hereinafter referred to as the "Contractor") and each of the following seven public transportation agencies (hereinafter referred to individually as an "Agency" or collectively as the "Agencies"):

1. Central Puget Sound Regional Transit Authority ("Sound Transit")
2. King County ("King County")
3. Kitsap County Public Transportation Benefit Area ("Kitsap Transit")
4. Pierce County Public Transportation Benefit Area ("Pierce Transit")
5. Snohomish County Public Transportation Benefit Area ("Community Transit")
6. City of Everett ("Everett")
7. State of Washington, acting through the Washington State Department of Transportation, Washington State Ferries Division ("WSF")

**Recitals**

- A. Effective April 29, 2003, each of the Agencies and the Contractor entered into Contract #229944 ("Contract") to implement a Regional Fare Coordination System ("RFC System") to establish a common fare system utilizing smart card technology. The Contractor is responsible for the development, implementation, operation and maintenance of the RFC System as specified in the Contract.
- B. The Agencies and the Contractor desire to amend the Special Programs Section in Section VI, Implementation, of Exhibit 9, Price Schedule, in connection with the Work described in Change Order 40 to which this is attached.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the sufficiency of which is hereby acknowledged, the Agencies and the Contractor hereby agree to amend the Contract as follows:

### Section 1.0 Price Schedule

The Special Programs Section of Exhibit 9, Price Schedule, is hereby amended to read as follows:

### SPECIAL PROGRAMS

#### LUMP SUM COST

Change Order No. 40

Bus Rapid Transit for Community Transit Bus Rapid Transit for King County Metro	\$124,738 <del>\$73,241</del> <ins>75,240*</ins>
<b>TOTAL</b>	<b>\$199,978</b>

22/12/09  
AC 12/01/09

- \* The amount agreed to by KCM for the training manual (\$1789) was omitted from the total shown in the Exhibit 9 Price box
- \* The design amount owed by KCM had numbers transposed: The correct figure is \$73,451; the number incorrectly shown was \$73,241